

Sunlight Partners, LLC 4115 E Valley Auto Dr. Mesa, AZ 85206

SP-5046 SUB 0

July 1, 2014

Dear Ms. Mount

This filing is for an *Application For Certificate Of Public Necessity And Convenience (Rule R8-64)* for the proposed Helios Solar LLC, 4.0 MW solar facility. A copy of this application has also been provided to Duke Energy Progress.

Sincerely,

Michael Wallace, PE

Michael Wallen

Director of Project Management 27 Pearl St. FL 4 Portland ME 04101



NCUC Application for Certificate of Public Necessity and Convenience

1. Full Name, Business Address and Business Phone Number of Applicant:

Helios Solar, LLC 4115 East Valley Auto Dr #204 Mesa AZ, 85206

Attn: Michael Wallace 207-899-1123 mwallace@catecapital.com

2. Type of Facility Owner:

The Facility owner is a corporation, Helios Solar, LLC was incorporated in North Carolina on 12/12/2014. Michael Wallace is authorized to act as a corporate agent.

3. Nature of Generating Facility including the type and source of power or fuel.

The Generating Facility will consist of multiple solar photovoltaic arrays and (3) 1500 kW inverters with transformers. The facility will produce 4 MW AC (net). The source of power is Solar.

4. Address or Location of Generating Facility

635 Ronald Tharrington Rd. Louisburg, NC 27549

5. Land owner of Site

The land owner of the site is Mrs. Eleanor Baker. The Applicant has entered into a long term lease with the owner, encompassing the expected life cycle of the facility.

6. Description of Equipment comprising the generating facility and the manner of their operation:

The Generating Facility will consist of multiple solar photovoltaic arrays and (3) 1500 kW inverters and transformers. The facility will produce 4 MW AC (net). The source of power is Solar. There will be no constructed buildings associated with the facility on site and the entire generating facility will be fenced in for security purposes. The facility will interconnect to Duke Energy Progress using a single point of common coupling through pre-mounted revenue meters, blade and fused disconnects.

7. The Projected Maximum Dependable Capacity In Megawatts

Solar Energy is an intermittent energy source, the maximum dependable capacity is 0 MW

8. The projected cost of the facility:

The projected cost is 13,500,000

9. The projected date the facility will come on line:

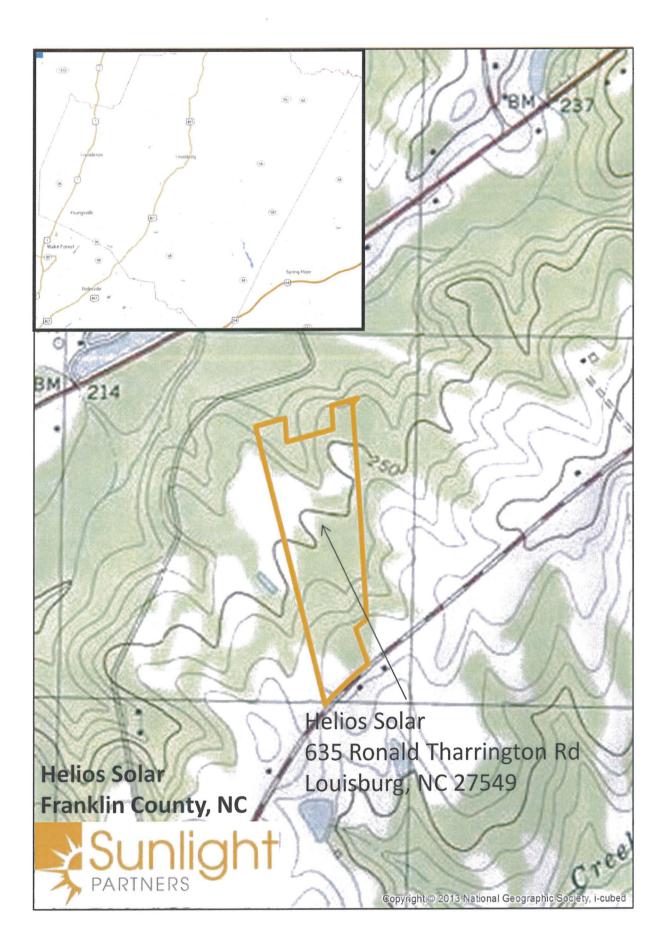
December 31st 2016

10. The Applicants general plan for sale of the electricity to be generated, including the utility to which the applicant plans to sell the electricity, any provisions for wheeling the electricity, arrangements for firm, non-firm or emergency generation, the service life of the project and the projected annual sales in kilowatt hours:

The applicant plans to sell the electricity to Duke Energy Progress, under the schedule PP-N(NC) Non Hydroelectric Qualifying Facilities Purchased Power. There are no provisions for wheeling the electricity, nor any arrangements for firm, non- firm or emergency generation. The projected lifespan of the equipment is twenty years. The projected annual sales in KWh are 9,052,000 KWh. The applicant plans to produce renewable energy certificates that are eligible for compliance with the states renewable energy and energy efficiency portfolio standard.

11. A complete list of all federal and state licenses, permits and exemptions required for construction and operation of the generating facility and a statement on whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application; a copy of those that have not been obtained at the time of the application should be filed with the commission as soon as they are obtained:

The applicant has received self-certification as a Qualifying Facility under the Federal Energy Regulatory Commission (QF15-343-000). The applicant has not yet filed for a North Carolina Erosion Control Permit, an electrical permit or Storm Water Permit which will be filed upon acceptance by the governing township or county the solar site will be installed in.



Note: Please complete the form, print it, have it signed, notarized, make 15 copies and send them to the Chief Clerk of the Commission. Be sure to print a copy for your records as you cannot save data onto the form, nor can you file it online. Be sure to attach additional information, such as maps, as required.

Application to Register a Renewable Energy Facility or New Renewable Energy Facility Pursuant to Rule R8-66

(Applicants should consult Rule R8-66 while completing this form in order to ensure they provide sufficient information.)

Facility name:	Helios Solar, LLC
Full and correct name of the owner of the facility:	Helios Solar, LLC
Business address:	4115 East Valley Auto Dr. #204 Mesa, AZ 85206
Electronic mailing address:	mwallace@catecapital.com
Telephone number:	207.899.1123
	•
Owner's agent for purposes of this application, if applicable:	Not Applicable
Agent's business address:	Not Applicable
Agent's electronic mailing address:	Not Applicable
Agent's telephone number:	Not Applicable
The owner is: Helios Solar, LLC	Individual Partnership Corporation (including LLC)
If a corporation, state and date of incorporation.	State North Carolina Date 12.12.14

	SP-50	046 SUB 0
If a corporation that is incorporated outside of North Carolina, is it domesticated in North Carolina?	Yes No	OFFICIAL
	Not Applicable	
If a partnership, the name and business address of each general partner. (Add additional sheets if necessary.)		Feb 09 2015
Nature of the renewable energy facility:	Photovoltaic Solar Facility	
1. Describe the facility, including its technology, and the source of its power and fuel(s). Thermal facilities should describe how its host uses the facility's thermal energy output. (Add additional sheets if necessary.)	The generating facility will consist of multiple solar photovoltaic arrays and three 1500 kW inverters with transformers. The facility will produce 4 MW AC (net). There will be no constructed buildings associated with the facility on-site. The entire generating facility will be fenced in for security and safety purposes. The facility will interconnect to Duke Energy Progress using a single point of common coupling through mounted revenue meters with blade and fused disconnects. The facility will use sunlight as the fuel source.	
2. Whether it produces electricity, useful thermal energy, or both.	The Facility will produce only electricity.	
3. Nameplate capacity in kW/MW (AC) and/or maximum Btu per hour for thermal facilities.	4 MW AC Nameplate rating.	

The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks. Attach a map, such as a county road map, with the location indicated on the map.

635 Ronald Tharrington Rd. Louisburg, NC 27549 (Franklin County) - Please see attached map.

Site ownership:	Eleanor Baker
1. Is the site owner other than the facility owner? If yes, who is the site owner?	Eleanor Baker
2. What is the facility owner's legal interest in the site?	Long Term Lease

List the approvals that are required to build and/or operate this facility, and attach copies of those that have been obtained. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of approvals for one such turbine but shall add an attestation that approvals for all of the turbines are available for inspection.

Federal permits and licenses: ' ' ' ' ' ' ' ' ' ' ' ' '	FERC QF Self Certification
2. State permits and licenses:	Erosion control permit, Driveway permit, Storm water permit.
3. Exemptions required for construction and operation of the facility:	None
4. Statement of whether each has been obtained or applied for (attach copy of those that have been obtained with this application):	FERC QF Self-certification obtained QF15-343-000 Erosion Control Permit: Have not yet been applied for. Storm Water Permit: Have not yet been applied for. Driveway Permit: Have not yet been applied for.

If the facility has been placed into service, on what date did the facility begin operating? If the facility is not yet operating,	Not in Service 12/31/2016
on what date is the facility projected to be placed into service?	
If the facility is already operating, what is the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period? Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year.	NA
What entity does (or will) read the facility's energy production meter(s) for the purpose of issuing renewable energy certificates?	Duke Energy Progress
For thermal energy facilities, describe the method to be used to determine the facility's thermal energy production, in BTUs, that is eligible for REC issuance.	NA
Does the facility participate in a REC tracking system and if so, which one? If not, which tracking system will the facility participate in for the purpose of REC issuance?	NC-RETS

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If this facility has already been the subject of a proceeding or submittal before the Commission such as a Report of Proposed Construction or a Certificate of Public Convenience and Necessity, please provide the Commission Docket Number, if available.	NA	OFFICIAL

The owner of the renew and notarized:	vable energy facility s	shall provide	e the follov	ving at	testations, sig	jned
1. Yes No	I certify that the federal and state land of the environment	aws, regula	itions, and	rules	for the protect	
2. Yes No	I certify that th G.S. 62-133.8(a)(5) renewable e new renewa and that the facility renewable e new renewa	or (7) as a nergy facili ble energy will be ope energy facil	i: ty, or facility, rated as a: ity, or		requirements	o
3. Yes No	I certify that 1) mecontract with NC General the same electricity 2) any renewable electric power) sold G.S. 62-133.8 have resold for any other portfolio standard certificates in North other state or count the certificates will at the power is but	reenPower reenPower rergy certifi to an elect not, and w purpose, ir or voluntar Carolina (ry, and that not be offer	to sell oun being tracates (whee stric power will not, be including any purchase such as Note the electriced or sold	r REC: cked i ether of suppli remark nother of e of re c powe with a	s emanating for NC-RETS; report not bundled for comply teted or otherwarenewable encenewable encenewable encenewable encenewable encenewable encenewable encenewable encenewable encenewable to representation.	from and with wise ergy ergy any with
4. Yes No	I certify that I conse and records by the transactions with N agree to provide the our books and recordacility.	Public Staf lorth Carol e Public Sta	f insofar as ina electric aff and the	s those c power Comr	records relate er suppliers, nission acces	e to and
5. Yes No	I certify that the infor that the facility has ea	•			•	
6. Ves No	I certify that I am that am duly authorized of this filing.					-
Muhael Wo	llar		Direc	tor of Proj	ect Management	
(Signature)					(Title)	
Michael Wallace (Name - Printed or T	yped)		01/30)/15	(Date)	—

VERIFICATION

STATE OF MMNL COUNTY O	of cumberland
being first duly sworn, says that the facts stated in exhibits, documents, and statements thereto attache	
WITNESS my hand and notarial seal, this 5th da	ay of <u>February</u> , 20 <u>15</u> .
My Commission Ex	xpires: 9/24/20
Signature of Notary Public	
Name of Notary Public - Typed or Printed	KATELYN A. PAYNE Notary Public, Maine commission Expires September 24, 2020

The name of the person who completes and signs the application must be typed or printed by the notary in the space provided in the verification. The notary's name must be typed or printed below the notary's seal. This original verification must be affixed to the original application, and a copy of this verification must be affixed to each of the 15 copies that are also submitted to the Commission.

2. THE PURPOSE OF THIS PLAN IS FOR A CONDITIONAL USE PERMIT APPLICATION FOR REVIEW AND APPROVAL BY THE NASH COUNTY BOARD OF COMMISSIONERS TO CONSTRUCT A SOLAR ELECTRIC POWER PLANT. THE LOCATION OF PROPOSED IMPROVEMENTS INCLUDING BUT NOT LIMITED TO, FENCING, SOLAR ARRAY, RACKING, INVERTERS, OVERHEAD POLES AND LINES ETC. SHOWN IS APPROXIMATE AND MAY BE SUBJECT TO MODIFICATION DUE TO SITE CONDITIONS. ADDITIONAL PERMITTING REQUIREMENTS (NCDOT, NCDENR, USACOE, ETC.) EQUIPMENT SPECIFICATIONS, AND/OR OTHER CONSTRAINTS. ANY REVISIONS WILL BE SUBMITTED FOR STAFF APPROVAL PRIOR TO CONSTRUCTION TO VERIFY COMPLIANCE WITH ZONING REQUIREMENTS AND CONDITIONS AS APPROVED.

ENGINEER'S NOTE

1. DUE TO THE LOW TRAFFIC VOLUME, MINIMAL THIS DEVELOPMENT. TEMPORARY MAINTENANCE PARKING.

. PARKING WILL BE PROVIDED UPON BUILD OUT CREW SHALL UTILIZE THE GRAVEL ACCESS WAY

THE ONLY UTILITY PROPOSED FOR THIS SITE SHALL BE PROGRESS. EMPLOYED OR PROPOSED FOR THIS PROJECT. MINIMAL SIGNAGE SHALL BE PROPOSED AT THIS TIME. NO OTHER UTILITIES SHALL

NO EXTERIOR LIGHTING IS PROPOSED AT THIS

6. DURING GRADING AND CONSTRUCTION, DUST CONTROL WILL BE PROVIDED BY WATERING AND CONTROLLED VEHICULAR SPEEDS. AFTER CONSTRUCTION, DUST CONTROL WILL BE IMPLEMENTED INSTALLING GRAVEL ROADS AS WELL AS REDUCING THE VEHICULAR SPEEDS. THE SOLAR PANELS WILL ACT AS WIND BREAK.

ВΥ

7. WEED AND NOXIOUS PLANTS SHALL BE ROUTINELY REMOVED FROM THE SITE. IT RESPONSIBILITY OF THE DEVELOPER TO REGULARLY PROVIDE THIS SERVICE TO THE STRUCTURES WILL NOOT EXCEED 25 FEET IN HEIGHT AS MEASURED FROM GRADE THE STRUCTURE TO ITS HIGHEST POINT PER ARTICLE X1, SECTION 11-4.72aI IS THE AT THE BASE

NO PERMANENT STRUCTURES ARE PROPOSED FOR THIS PROJECT. PER THE DEVELOPMENT

10. PROPOSED SECURITY FENCE WILL BE TOPPED WITH BARBED WIRE STANDARDS.

11. COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION

12. PROJECT AREA, INCLUDING CONSTRUCTION STAGING AREAS WILL BE CLEARED AND GRUBBED AS NECESSARY RETAINING PRE—DEVELOPMENT DRAINAGE PATTERNS (I,E, NO MASS GRADING). A PORTION OF PROJECT AREAS MAY CONSIST OF TREE CLEARING ONLY (NO GRUBBING) TO ALLEVIATE SHADING OF THE ARRAY, AS INDICATED ON THE SITE PLAN. MINOR GRADING WILL OCCUR AROUND INVERTER AREAS TO DIVERT SURFACE DRAINAGE, CONSTRUCTION STAGING AND AREAS SUBJECT TO RUTTING DURING CONSTRUCTION WILL BE TEMPORARILY STABILIZED WITH LOGGING MATS. WHICH WILL BE REMOVED FOLLOWING CONSTRUCTION, THE ONLY PERMANENT IMPERVIOUS SURFACES WILL BE TWO CONCRETE SLABS, TOTALING LESS THAN 100 SF AT EACH INVERTER.

13. SYSTEMS, EQUIPMENT AND STRUCTURES WILL NOT EXCEED FIFTEEN FEET IN HEIGHT WHEN GROUND MOUNTED. EXCLUDED FROM THIS HEIGHT REQUIREMENT, ARE ELECTRIC TRANSMISSION LINES AND UTILITY POLES.

ANDSCAPE NOTE

1. THE BUFFER YARD SHALL CONTAIN 3 CANOPY TREES AND 5 UNDERSTORY TREES PER 100 LINEAR FEET OF BUFFER YARD. CANOPY TREES SHALL BE A MINIMUM OF 8 FEET IN HEIGHT AND 2 INCHES IN CALIPER (MEASURED 6 INCHES ABOVE GRADE) WHEN PLANTED. WHEN MATURE, A CANOPY TREE SHOULD BE AT LEAST 40 FEET HIGH AND HAVE A CROWN WIDTH OF 30 FEET OR GREATER. UNDERSTORY TREES SHALL BE A MINIMUM OF 4 FEET HIGH AND 1 INCH IN CALIPER (MEASURED 6 INCHES ABOVE GRADE) WHEN PLANTED.NASH COUNTY UDO PAGE 11.— 28 — OF 105

THE BUFFER YARD SHALL ALSO CONTAIN 25 SHRUBS PER 100 LINEAR FEET OF BUFFER YARD. ALL SHRUBS SHALL BE OF A SPECIES WHICH CAN BE EXPECTED TO REACH A MINIMUM HEIGHT OF 36 INCHES AND A MINIMUM SPREAD OF 30 INCHES WITHIN 3 YEARS OF

TYPICAL

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-----VARIES -

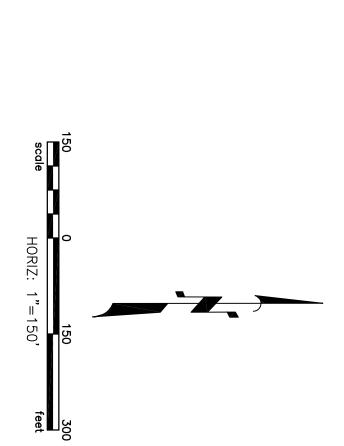
10'-0"

⊢BARBED

2. THE EXISTING WOODS/VEGETATION ON THE ADJACENT PROPERTY SHALL SATISFY THE NECESSARY SCREENING REQUIREMENTS WHERE THE SOLAR FARM FACILITY IS LOCATED WITHIN 100' OF THE PROPERTY LINE PER THE REQUIREMENTS OF THE NASH COUNTY UDO ARTICLE XI, SECTION 11-3.6. HOWEVER THE BURDEN TO MAINTAIN THE REQUIRED SCREENING REMAINS WITH THE OWNER/OPERATOR OF THE SOLAR FARM. SHOULD THE ADJOINING EXISTING WOODS/VEGETATION BE REMOVED, ADDITIONAL SCREENING SHALL BE INSTALLED TO MEET THE REQUIREMENTS OF THE NASH COUNTY UDO ARTICLE XI, SECTION 11-3.3 (B) OR 11-3.4 AT THAT TIME. OCONTAIN 25 SHRUBS PER 100 LINEAR FEET OF BUFFER OF A SPECIES WHICH CAN BE EXPECTED TO REACH A MINIMUM MINIMUM SPREAD OF 30 INCHES WITHIN 3 YEARS OF

PROPOSED 20' GRAVEL ROAD WITH HAMMERHEAD TURNAROUND.

COLUMBUS COUN NORTH CAROLINA



SHEET

NO.

NO. SOLAR

1 OF 1

<u>DOUBL</u>

SWING

GATE

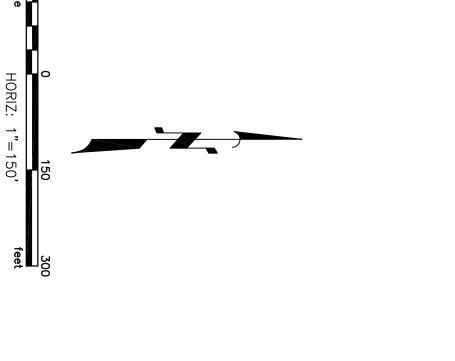
PLUNGER

ROD

CATCH

MINIMUM-

N.T.S



VICINITY MAP

DEVELOPER

SUNLIGHT PARTNERS, LLC
4115 E. VALLEY AUTO DR. SUITE#204
MESA. ARIZONA 85206
PHONE: 801-550-7150
FAX: 480-582-1575
ATTN: KEITH COLSON

ELEANOR BAKER 4075 NC 98 HWY YOUNGSVILLE, NC 27596 OWNER

ENGINEER

D.E.E.P. ENGINEERING 125 CARRIAGE WAY

SCARBOROUGH, ME 04074
PHONE: 207-217-2216
ATTN: MICHAEL WALLACE SOLUTIONS

PARCEL NUMBER

SITE ADDRESS

HELIOS SOLAR LLC
635 RONALD THARRINGTON RD
LOUISBURG, NC 27549

PARID # 2815-59-7489 ZONING DISTRICT =

SITE SUMMARY TABLE

:36 ACRE
:36 ACRE
:AGRICULTURAL
:ALTERNATIVE ENERGY GENERATING F
:±5%
:21 ACRES

ROSS ACREAGE ET ACREAGE XISTING LAND USE ROPOSED LAND USE ERCENT IMPERVIOUS REA OF DISTURBANCE

SETBACKS

SITE PLAN "HELIOS SOLAR LLC"

CALL THREE WORKING DAYS BEFORE YOU DIG -800-632-4949

640

INVERTER

NCS MONUMENT

R/W LINE

MAJOR CONTOUR

MINOR CONTOUR

EXISTING TREELINE SOLAR PANELS

PROPOSED UTILITY SECTION

BOUNDARY LINE SET BACK LINE SECURITY FENCE

PROJECT:

LEGEND

SHEET INDEX

1.....SITE PLAN

FRONT = 50 FEET SIDE = 15 FEET

COLUMBUS COUNTY, NORTH CAROLINA

REVISIONS:

P-5046 SU